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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,606	02/05/2002	James Mantyla	669-78	5890
7:	590 03/07/200	3		
Ludomir A. B		EXAMINER		
HOFFMANN 8 6900 Jericho Ti Syosset, NY 1			ELOSHWAY, CHARLES R	
Syusset, NT 1	1791		ART UNIT	PAPER NUMBER
			3751	
			DATE MAILED: 03/07/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

J'					
	Application No.	Applicant(s)			
	10/067,606	MANTYLA ET AL.			
Office Action Summary	Examiner	Art Unit			
	Charles R. Eloshway	3751			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above; the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status					
1) Responsive to communication(s) filed on 14 J	<u>anuary 2003</u> .				
2a) ☐ This action is FINAL. 2b) ☑ Thi	This action is FINAL. 2b)⊠ This action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4) Claim(s) 1-18 is/are pending in the application.					
4a) Of the above claim(s) 17 and 18 is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-16</u> is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) 1-18 are subject to restriction and/or election requirement.					
Application Papers					
9) The specification is objected to by the Examiner.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) The proposed drawing correction filed on		all disapproved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☒ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
 a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. 					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 5) Notice of Informal Patent Application (PTO-152) 6) Other:					
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Art Unit: 3751

DETAILED ACTION

Election/Restrictions

1. Claims 17 and 18 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim.

Election was made without traverse in Paper No. 4.

Specification

- 2. The disclosure is objected for the following reasons:
 - (a) It lacks a brief description of fig. 5;
 - (b) At pg. 8, line 12, "tough" should be "though"; and
- (c) The description of fig. 5 at pg. 9, lines 15-26 is inaccurate in identifying the elements shown because it includes reference numeral (105), which is not shown in fig. 5, designates the "groove" as numeral (110) even though numeral (110) identifies the O-ring, and omits mention of numeral (112), which is actually the previously-mentioned groove.

Appropriate correction is required.

Claim Objections

3. Claims 3-16 are objected to because of the following informalities:

Art Unit: 3751

In claims 3, 7, 8, 12, 13, 15 and 16, "said seal" should be "said sealing gasket."

In claim15, "said first" and "second connector portions" should be "said first" and "second coupler portions."

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 5, the location of the "center of curvature" is indefinite because it is unclear what the "centerline of tubing section" is.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 3751

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crawford in view of Stafford.

Regarding claim 1, Crawford teaches a "first tubing element" (C) with an "attachment bell" (generally the threaded flange C') at one end and a "first coupler portion" (C3, C4) at the other end, a "second tubing element" (F) having an "attachment bell" (unnumbered threaded portion at the left in fig. 2) at one end and a "second coupler portion" (F') at the other end, the "first tubing element" being "generally u-shaped" as seen in fig. 2), and a "connector" (E). Although the Crawford assembly lacks a "sealing gasket," Stafford teaches that such gaskets (16) are common in ball-and-socket pipe joints to prevent leakage. In view of Stafford, it would have been obvious to provide the Crawford assembly with a "gasket" between the "connector" and "second coupler portion" to prevent leakage.

Regarding claim 2, Stafford further teaches that an encircling shoulder (3) may be provided on the ball portion of the joint for engaging the end of the socket. See pg. 1, line 107-pg. 2, line 3. This feature creates an "angle stop" because

Art Unit: 3751

it prevents the joint from articulating beyond the point of contact between the shoulder and the socket. It would have been obvious to provide such a feature on the Crawford joint to limit the articulation of the joint.

The joint taught by Crawford meets the limitations recited in claims 3, 4, and 7.

Regarding claim 5 as it is best understood, although not explicitly taught by Crawford, the ball portion of the Crawford joint has a "center of curvature" located on a centerline of the passage through the ball portion, as clearly seen in fig. 2.

Regarding claim 6, although Crawford is silent as to the exact angle subtended by the outer portion of the ball element, it appears from fig. 2 that the Crawford ball meets the claimed angle. On the other hand, it would have been obvious to increase or decrease the surface area of the Crawford ball portion to increase or decrease the range of angles over which the joint may be articulated.

Regarding claims 8, 15, and 16, Stafford teaches that the "connector" (12) has a "rim" (14) that forms a wedge-shaped gap between the "connector" and ball portion into which the correspondingly wedge-shaped sealing gasket (16) is placed. It would have been obvious to provide these features in the Crawford joint to obtain the advantages associated therewith,

Art Unit: 3751

i.e., ease of construction, leakproofing, that Stafford discloses. See, e.g., Stafford, pg. 1, lines 14-18.

Regarding claim 9, the "outer seal surface" of the Stafford sealing gasket (16) is considered to be "conical" insofar as that term has been defined by applicant.

Regarding claims 10 and 12-14, Stafford teaches that the sealing gasket (16) is a "packing ring." It is well known in the art that "packing" refers to sealing rings made of compressible materials, usually rubber or plastic. As such, the Stafford gasket would be compressible so as to match the outer part-spherical surface of the ball portion. Moreover, it would have been obvious to mold the gasket from a suitable plastic material, such as low-density polyethylene, as a matter of design choice depending on the desired compressibility, joint tightness, etc.

Regarding claim 11, Stafford shows in fig. 1 that the "thrust face" (the face abutting the connector rim) is "generally planar."

Prior Art

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other

references cited teach various pipe joints having features common to the disclosed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles R. Eloshway whose telephone number is (703) 308-0104. The examiner can normally be reached on Monday-Thursday, 7AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (703) 308-2580. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7766 for regular communications and (703) 308-7766 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0975.

Charles R. Eloshway Primary Examiner Art Unit 3751

cre March 4, 2003